

## CLAIMS:

1. A tuning arrangement for receiving a plurality of signal channels and for tuning to a specific of said plurality of signal channels, the arrangement comprising a polyphase mixer (3) for mixing said specific signal channel to an intermediate frequency which is lower than twice the bandwidth of the channel, a polyphase IF filter (5) for rejecting the negative frequencies in the mixer output signal and a polyphase group delay equalizer (6) connected to the output of the polyphase IF filter,  
5 characterized in that the transfer function of the group delay equalizer has, for the frequency range of interest, only one or more pole-zero pairs (P-Z) alongside of the positive imaginary axis of the complex frequency plane with the pole(s) (P) and the zero(s) (Z) of said one or more pairs lying substantially symmetrically with  
10 respect to said positive imaginary axis.
  
2. A tuning arrangement as claimed in claim 1 characterized in that said polyphase group delay equalizer comprises an in phase part (R) and a quadrature phase part (R'), each of said parts comprising a balanced operational amplifier (A), first conductances ( $G_1, G_2$ ) and first capacitances ( $C_1, C_2$ ) connected in parallel between each output and the inverting input of the operational amplifier (A) for constituting the pole (P) in the complex frequency plane, second conductances ( $G_3, G_4$ ) between each input ( $I_1, I_2$ ) of the part and one of the inputs ( $N_1,$   
15  $N_2$ ) of the operational amplifier and second capacitances ( $C_3, C_4$ ) between each input ( $I_1, I_2$ ) of the part and the other of the inputs ( $N_2, N_1$ ) of the operational amplifier for constituting the zero in the complex frequency plane and further conductances ( $H_1$ ,  
20  $\dots H_4$ ) connecting the inputs ( $N_1, N_2$ ) of the operational amplifier of each part to the inputs ( $I'_1, I'_2$ ) and to the outputs ( $O'_1, O'_2$ ) of the other of said parts for shifting the pole  
25 and the zero along the positive imaginary axis of the complex frequency plane.

3. A tuning arrangement as claimed in claim 1  
characterized in that a cascade of group delay equalizers is connected to the output of  
the polyphase IF filter, each of said group delay equalizers having only one pole-zero  
5 pair alongside of the positive imaginary axis of the complex frequency plane.